

222895

SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 1/26/2006 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 22511.

Date 4/24/07 Serial # 10/60,597 Priority Application Date 12/27/02
Your Name M. Lewis Examiner # 73172
AU 2022 Phone 202-1838 Room 5A39
In what format would you like your results? Paper is the default. ☒ PAPER ☐ DISK ☐ EMAIL

If submitting more than one search request form, please prioritize the searches in order of need.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB
Other: _____

Need before 4/27

What relevant art have you found so far? Please attach citations or Information Disclosure Statements.

What types of references would you like? Please checkmark:

Primary Refs ☒ Nonpatent Literature ☐ Teaching Refs ☐
Secondary Refs ☐ Foreign Patents ☐ Other ☐

Is this a "Fast & Focused Search" request? (Circle One) YES ☐ NO ☒

A "Fast & Focused Search" is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2800 and on the STIC NPL Web Page at <http://uspto-a-pattr-2/siraapps/stic/npl/nplsearch.htm>

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 24-27, + 32-38
CAND LED

Problem: see pages 4-5
Solution: " 4 5-6

6,499,661

Staff Use Only

Searcher: Michael Olexa
Searcher Phone: 571-272-2663
Searcher Location: STIC-EIC2800, JEF-4B68
Date Searcher Picked Up: 4/23
Date Completed: 89
Searcher Prep/Rev Time: _____

Type of Search

Structure (#) _____
Bibliographic ☒
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors

STN _____
Dialog ☒
Questel/Orbit _____
Lexis-Nexis _____
WWW/Internet _____
Other _____

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[File 2] INSPEC 1898-2006/Jan W2
 [File 6] NTIS 1964-2006/Jan W4
 [File 8] Ei Compendex(R) 1970-2006/Jan W4
 [File 34] SciSearch(R) Cited Ref Sci 1990-2006/Jan W4
 [File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec
 [File 35] Dissertation Abs Online 1861-2006/Jan
 [File 65] Inside Conferences 1993-2006/Jan W5
 [File 94] JICST-EPlus 1985-2006/Nov W3
 [File 99] Wilson Appl. Sci & Tech Abs 1983-2006/Apr
 [File 144] Pascal 1973-2006/Jan W2
 [File 23] CSA Technology Research Database 1963-2006/Jan
 [File 103] Energy SciTec 1974-2006/Jan B1
 [File 31] World Surface Coatings Abs 1976-2006/Jan
 [File 95] TEME-Technology & Management 1989-2006/Jan W5
 [File 57] Electronics & Communications Abstracts 1966-2006/Aug
 [File 68] Solid State & Superconductivity Abstracts 1966-2006/Jan
 [File 60] ANTE: Abstracts in New Tech & Engineer 1966-2006/Jan
 [File 293] Engineered Materials Abstracts 1966-2006/Jan
 [File 239] Mathsci 1940-2005/Feb
 [File 256] TECINFOSOURCE 82-2005/DEC

| Set | Items | Description |
|-----|----------|--|
| S1 | 8048278 | S LES OR L()E()S OR LED OR LIGHT(2N) (EMIT?????? OR EMIS??????) OR OLED OR O()L()E()D OR EL OR E()L OR ELS OR ELECTROLUM? OR SEMICONDUCT????(2N) (LASER? ? OR LIGHT???? OR DIODE? ?) OR LIGHT()EMIT??????() (SEMICONDUCTOR???? OR WAFER???? OR IC? ? OR INTEGRATED()CIRCUIT? ? OR CHIP? ? OR CIRCUIT????) OR SURFACE()EMIT??????()LASER? ? OR PHOTO???????? OR VCSEL OR V()C()S()E()L OR HBLED OR H()B()L()E()D OR ORGANIC()ELECTROLUM???? OR OEL OR O()E()L |
| S2 | 117529 | S GAN OR GALLIUM()NITRIDE |
| S3 | 1951143 | S (FIRST??? OR SECOND??? OR THIRD??? OR 1 OR 2 OR ONE OR TWO OR CONDUCT???? OR CRYSTAL?????) (3N) (LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER) (2N) (LAYER???? OR COAT???) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C) |
| S4 | 115433 | S ACTIVE????(3N) (LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER) (2N) (LAYER???? OR COAT???) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C) |
| S5 | 41415 | S CLAD????(3N) (LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER) (2N) (LAYER???? OR COAT???) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C) |
| S6 | 824712 | S (CONDUCT???? OR REFLECT???? OR ADHE???? OR TAPE? ? OR EPOXY OR STICK???? OR GLUE???? OR BOND???? OR PAST???? OR CEMENT????) (3N) (LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER) (2N) (LAYER???? OR COAT???) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C) |
| S7 | 320296 | S (N OR P) (2N) (TYPE OR KIND OR DOPE OR DOPING OR DOPANT OR IMPURITY??? OR ION()IMPLANT???? OR ADDITIVE?? OR ADMIX????) |
| S8 | 12339571 | S CONTACT??? OR CONNECT???? OR POINT??? OR INTERACT???? OR LINK???? |
| S9 | 118623 | S (UNIFORM???? OR HOMOGENOUS OR HOMOGENEOUS OR CONSISTEN???? OR STEAD???? OR PERSISTEN???? OR CONTINUOUS????) (3N) (THICK???? OR WIDTH???? OR BREADTH???? OR DIMENSION????) |
| S10 | 118999 | S (RESIST???? OR OHM????) (3N) (CONTACT???? OR CONNECT???? OR INTERACT???? OR LINK???) |
| S11 | 294230 | S (IMPROV???? OR INCREAS???? OR BETTER OR GREAT???? OR MAXIM???? OR EXCEL??? OR ENHANC???? OR REDUC???? OR DECREAS??? OR ATTENUAT???? OR MINIM???? OR LIMIT????) (3N) (RADIAT??? OR EMIT???? OR EMIS???? OR FORWARD()VOLT????) |

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S12 4599891 S SILVER OR AG OR AU OR GOLD OR TIN OR SN OR AU()AG OR PB()SN OR INDIUM OR LEAD
S13 0 S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7 AND S8 AND S9 AND S10 AND S11 AND
S12
S14 175 S S1 AND S2 AND S11 AND S3
S15 2 S S14 AND S4 AND S5
S16 1 RD (unique items)
S17 31 S S14 AND S6
S18 2 S S17 AND S7
S19 2 RD (unique items)
S20 3 S S17 AND S8
S21 0 S S17 AND S9
S22 1 S S17 AND S10
S23 31 S S17 AND S11
S24 11 S S23 AND S12
S25 7 RD (unique items)
S26 1 S S1(3N)S2(3N)S3 AND S4 AND S5 AND S6
S27 121 S S1(3N)S2(3N)S3 AND S7
S28 32 S S27 AND S8
S29 0 S S28 AND S9
S30 8 S S28 AND S10
S31 5 RD (unique items)
S32 0 S S28 AND S11
S33 23 S S28 AND S12
S34 12 RD (unique items)
S35 1 S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7
S36 17 S S1 AND S2 AND S3 AND S4 AND S5
S37 13 RD (unique items)
S38 2 S S20 NOT (S16 OR S19)
S39 0 S S22 NOT (S16 OR S19 OR S20)
S40 5 S S25 NOT (S16 OR S19 OR S20 OR S22)
S41 1 S S26 NOT (S16 OR S19 OR S20 OR S22 OR S25)
S42 5 S S31 NOT (S16 OR S19 OR S20 OR S22 OR S25 OR S26)
S43 8 S S34 NOT (S16 OR S19 OR S20 OR S22 OR S25 OR S26 OR S31)
S44 1 S S35 NOT (S16 OR S19 OR S20 OR S22 OR S25 OR S26 OR S31 OR S34)
S45 10 S S37 NOT (S16 OR S19 OR S20 OR S22 OR S25 OR S26 OR S31 OR S34 OR S35)

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[File 344] Chinese Patents Abs Jan 1985-2006/Jan

[File 347] JAPIO Nov 1976-2005/Sep(Updated 060103)

[File 350] Derwent WPIX 1963-2006/UD,UM &UP=200607

[File 371] French Patents 1961-2002/BOPI 200209

Set Items Description

S1 2718747 S LES OR L()E()S OR LED OR LIGHT(2N)(EMIT?????? OR EMIS??????) OR OLED OR O()L()E()D OR EL OR E()L OR ELS OR ELECTROLUM? OR SEMICONDUCT????(2N)(LASER? ? OR LIGHT???? OR DIODE? ?) OR LIGHT().EMIT??????() (SEMICONDUCTOR???? OR WAFER???? OR IC? ? OR INTEGRATED()CIRCUIT? ? OR CHIP? ? OR CIRCUIT????) OR SURFACE().EMIT??????()LASER? ? OR PHOTO???????????? OR VCSEL OR V()C()S()E()L OR HLED OR H()B()L()E()D OR ORGANIC()ELECTROLUM???? OR OEL OR O()E()L

S2 11447 S GAN OR GALLIUM()NITRIDE

S3 3012340 S (FIRST??? OR SECOND??? OR THIRD??? OR 1 OR 2 OR ONE OR TWO OR CONDUCT???? OR CRYSTAL?????) (3N)(LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER)(2N)(LAYER???? OR COAT????) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C)

S4 136862 S ACTIVE????(3N)(LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER)(2N)(LAYER???? OR COAT????) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C)

S5 53391 S CLAD????(3N)(LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER)(2N)(LAYER???? OR COAT????) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C)

S6 1284768 S (CONDUCT???? OR REFLECT???? OR ADHE???? OR TAPE? ? OR EPOXY OR STICK???? OR GLUE???? OR BOND???? OR PAST???? OR CEMENT????) (3N)(LAYER???? OR COAT???? OR COVER???? OR SHEET??? OR LAMINA???? OR OVERLAY???? OR (OVER OR COVER)(2N)(LAYER???? OR COAT????) OR STACK???? OR MULTILAYER???? OR MULTI()LAYER??? OR MULTISTACK???? OR MULTI()STACK??? OR MATERIAL??? OR SUBSTRAT??? OR CHIP OR MICROCHIP OR CIRCUIT??? OR IC OR I()C)

S7 138788 S (N OR P)(2N)(TYPE OR KIND OR DOPE OR DOPING OR DOPANT OR IMPURITY??? OR ION()IMPLANT???? OR ADDITIVE?? OR ADMIX????)

S8 7430135 S CONTACT??? OR CONNECT???? OR POINT??? OR INTERACT???? OR LINK????

S9 863211 S AU()SN OR SN OR AU()AG OR PB()SN OR AG OR SN OR INDIUM OR SILVER OR GOLD OR TIN OR LEAD

S10 74952 S (UNIFORM???? OR HOMOGENOUS OR HOMOGENEOUS OR CONSISTEN???? OR STEAD???? OR PERSISTEN???? OR CONTINUOUS????) (3N)(THICK???? OR WIDTH???? OR BREADTH???? OR DIMENSION????)

S11 147204 S (RESIST???? OR OHM????) (3N)(CONTACT???? OR CONNECT???? OR INTERACT???? OR LINK???)

S12 84055 S (IMPROV???? OR INCREAS???? OR BETTER OR GREAT???? OR MAXIM???? OR EXCEL??? OR ENHANC???? OR REDUC???? OR DECREAS??? OR ATTENUAT???? OR MINIM???? OR LIMIT????) (3N)(RADIAT??? OR EMIT???? OR EMIS???? OR FORWARD()VOLT????)

S13 154158 S IC=(H01L-021/00 OR H01L-029/06 OR H01L-033/00 OR C30B-023/00 OR H01L-021/20 OR H01L-021/205 OR H01L-021/36 OR H01L-027/15 OR H01L-033/00)

S14 12835 S MC=(U12-A01 OR U12-A01A2 OR U12-A01A1A)

S15 0 S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7 AND S8 AND S9 AND S10 AND S11 AND

S12

S16 642 S S1 AND S2 AND S3 AND S4 AND S5

S17 106 S S16 AND S12

S18 18 S S17 AND S11

S19 13 S S18 AND S7

S20 10 S S19 AND S9

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|-----|----|--|
| S21 | 20 | S S1(3N)S2(3N)S3 AND S4 AND S5 AND S6 AND S7 |
| S22 | 12 | S S21 AND S8 |
| S23 | 5 | S S22 AND S9 |
| S24 | 0 | S S22 AND S10 |
| S25 | 2 | S S22 AND S11 |
| S26 | 2 | S S22 AND S12 |
| S27 | 13 | S S21 AND S13 |
| S28 | 9 | S S21 AND S14 |
| S29 | 1 | S S25 NOT S23 |
| S30 | 1 | S S26 NOT (S23 OR S25) |
| S31 | 5 | S S28 NOT (S23 OR S25 OR S26) |
| S32 | 5 | S S22 NOT (S23 OR S25 OR S26 OR S28) |
| S33 | 2 | S S27 NOT (S23 OR S25 OR S26 OR S28 OR S22) |
| S34 | 10 | S S20 NOT (S23 OR S25 OR S26 OR S28 OR S22 OR S27) |
| S35 | 3 | S S19 NOT (S23 OR S25 OR S26 OR S28 OR S20 OR S22 OR S27) |
| S36 | 5 | S S18 NOT (S19 OR S23 OR S25 OR S26 OR S28 OR S20 OR S22 OR S27) |